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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/813,079	03/20/2001	Tsutomu Takahashi	FUJI 18.486	1390

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EXAMINER

VU, PHUONG T

ART UNIT	PAPER NUMBER
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2841

DATE MAILED: 07/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/813,079

Applicant(s)

TAKAHASHI ET AL.

Examiner

Phuong T. Vu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8,12-14,16 and 17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7 is/are allowed.
- 6) ☒ Claim(s) 8,12,14 and 17 is/are rejected.
- 7) ☐ Claim(s) 13,16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Claim Objections

1. Claim 8 is objected to as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention and as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. The claim recites that the first and second spring members elastically deform in response to inward deformation of the open ends of the first and second side faces of the metal case, however provides no description of the characteristics or physical orientation of the open ends or of the spring members in the plug-in unit which would enable the open ends and spring members to deform in this manner. It is unclear from the claim language how the open ends cause inward deformation.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

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3. Claims 8, 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Monson et al. (US 6,480,391B1). Regarding claim 8, the reference discloses a plug-in unit 95 inherently comprising a printed board provided in the plug-in unit, a metal case including top (large side face shown in figure 3) and bottom (directly opposed to the above-mentioned large side face) faces, and parallel first (top side face provided with 135) and second side (directly opposed to top side face) faces perpendicular to the top and bottom faces so as to cover said printed board, the first and second side faces each having an open end (from which 135 protrude) and first and second spring members 135 that elastically deform in response to inward deformation of the open ends of the first and second side faces of said metal case as to press outward the open ends of the first and second side faces, respectively by resilient force thereof.

Regarding claim 17, each of the first and second spring members is formed of a plurality of leaf springs.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barker, III et al. (US 5,410,448). Regarding claim 12, the reference discloses a known communication device comprising a subrack unit 10 comprising a back

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wiring board 38 having connectors 40a-40c and first and second guide rail parts 42, 44 being attached to a top side and a lower portion of said subrack unit respectively, a plurality of plug-in units 16 being inserted along the first and second guide rail parts into said subrack unit to be plugged into the connectors of the subrack unit, a member 32 defined by the housing forming an air reservoir room formed under the second guide rail parts, and a plurality of motor-fan units 30 each having a motor fan and a lid member 106, said motor fan units being detachably plugged into said subrack unit. However, one motor fan unit is positioned above said member and only one motor fan is positioned under said member for forming the air reservoir room. Those skilled in the art at the time the invention was made would recognize that each motor fan unit 30 may be provided with a plurality of fans to provide more distributed cooling, to provide more reliability, and to provide added cooling to the subrack unit. Use of motor fan units with a plurality of fans in a subrack unit is expedient in the art. Barker shows that said lid member of bottom motor fan unit is pressed against a bottom face of said member for forming the air reservoir room so as to sealably integrate the motor fan unit and said member for forming an air reservoir room. In a configuration with the motor fan unit provided with several motor fans with corresponding lid members, the lid members of the bottom motor fan unit would also be pressed against a bottom face of said member for forming the air reservoir room so as to sealably integrate the motor fan unit and said member for forming an air reservoir room.

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6. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barker, III et al. (US 5,410,448) in view of Freige et al. (US 5,006,959).

Regarding claim 14, the Barker reference does not teach providing a filler plug-in unit having the same size and resistance to airflow as each of the plug-in units, where the filler plug-in unit fills an open space left in the subrack unit. However, Freige teaches that it is known in the art to provide such filler plug-in units in a subrack unit. The Freige reference is relied upon solely for this teaching. It would have been obvious to those skilled in the art at the time the invention was made that to provide filler plug-in units as shown in Freige to fill in open spaces in the subrack unit to compensate for misdirected airflow that would result without a filler plug-in unit and to provide electromagnetic shielding to the subrack unit.

Allowable Subject Matter

7. Claims 1-7 are allowed.

8. Claims 13, 16 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

9. Applicant's arguments with respect to the rejected claims have been considered but are moot in view of the new ground(s) of rejection.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong T. Vu whose telephone number is (703) 308-0303. The examiner can normally be reached on Mon. & Tues., 7:30 AM - 4:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin can be reached on (703) 308-3121. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Phuong T. Vu
Patent Examiner
June 28, 2003

